Applicant: Lawrence J. Bonassar et al. Attorney's Docket No.: 07917-137001 / UMMC 00-44

Serial No.: 10/081,360

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## Amendments to the Specification:

Please replace the paragraph beginning at page 2, line 17, with the following amended paragraph:

--In these methods, the tissue precursor cells can be chondrocytes or fibroblasts, or a combination thereof, and the hydrogel can be alginate, chitosan, pluronie PLURONICS<sup>TM</sup>, collagen, or agarose. If the hydrogel is alginate, the concentration can be from 0.5% to 8%, e.g., from 1% to 4%, e.g., approximately 2%. The gel formation can be induced by contacting the liquid hydrogel with a suitable concentration of a divalent cation, such as Ca<sup>++</sup>, e.g., at a concentration of about 0.2 mg/ml of alginate solution. The tissue precursor cells can be cultured in the solidified hydrogel construct, e.g., in vitro, for a period of 1 to 30 days prior to implantation. In these methods, the negative mold can be prepared using computer-aided design/computer-aided manufacturing (CAD/CAM) or rapid prototyping.